



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
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October 23, 2013

Robert H. Law, Ph.D.
de maximis, inc.
186 Center Street, Suite 290
Clinton, New Jersey 08809

Dear Dr. Law:

As you know, three models are currently being developed to support the remedial investigations and feasibility studies being conducted for the Lower Passaic River Study Area (LPRSA), as part of the Diamond Alkali Superfund Site.

First, the U.S. Environmental Protection Agency (EPA) is developing a model to support the Focused Feasibility Study for the lower 8-miles of the LPRSA (the "FFS Model"). Second, the Cooperating Parties Group (CPG) is developing a model for the entire 17-mile stretch of the LPRSA plus Newark Bay (the "17-mile RI/FS Model"). This model is being developed under EPA oversight pursuant to Administrative Order on Consent, CERCLA Docket No. 02-2007-2009, and it uses the FFS model as a starting point. Finally, the CPG has developed a model to support their targeted remedy approach, as presented to EPA Headquarters on July 24, 2013 (the "Targeted Remedy Model").

During our meetings and discussions, it is important to keep these three models distinct, as each has a different focus and is being developed with different levels of oversight.

The CPG is developing the 17-mile RI/FS Model with EPA oversight in order to support remedy selection for the full 17-mile LPRSA. EPA and the CPG have formal collaboration meetings to discuss the model development in a methodical way (though there has not been a formal meeting since February) and there is also relatively open communication between our modeling teams outside of meetings. To date, our discussions have still been focused primarily on the sediment transport portion of the model; we have not yet devoted much time to discussing the contaminant fate and transport portion of the model or the inputs to the model.

On the other hand, while they are still being refined, both EPA's FFS Model and the CPG's Targeted Remedy Model are being used to create trajectories which show how concentrations of contaminants of concern will decline over time in the river after various remedial options are taken. Presumably, the Targeted Remedy Model is based on the portions of the 17-mile RI/FS Model that we have already discussed, but it goes well beyond where we have provided oversight.

The trajectories produced by the FFS Model are markedly different than those produced by the Targeted Remedy Model, and these differences were highlighted during the July 24, 2013

presentation the CPG made to EPA Headquarters. Since the Targeted Remedy Model was developed without EPA oversight, EPA does not know why the trajectories produced by the two models are so different. As such, EPA Headquarters directed our office to determine why the two models are computing such different trajectories, separate and apart from the model collaboration process.

In response to this request, the CPG proposed a series of six meetings to discuss the model in detail. The first of these meetings was held on September 26, 2013. While EPA understood this meeting to concern the Targeted Remedy Model, the CPG apparently viewed it as an EPA/CPG 17-mile RI/FS Model collaboration meeting. By the end of the meeting, two things became clear. First, the information that was discussed – how the sediment data are interpolated for use in the model – is critical to the model development and, second, for the purposes of understanding why the Targeted Remedy Model trajectories differ from those of the FFS Remedy Model, the meeting could have been much shorter. The information discussed is critical for the development of the 17-mile RI/FS Model, but the level of detail presented during the meeting is not needed to answer the relatively simple charge from EPA Headquarters of determining why the Targeted Remedy Model and the FFS Model are producing different results.

Given this situation, and as we discussed on October 21, 2013, we propose the following:

- Schedule a single meeting in the next two to three weeks during which the CPG will present all of the assumptions/decisions they have made in the development of their Targeted Remedy Model which they think set it apart from EPA's FFS Model. Presumably, these are the differences that the series of six meetings were going to elaborate on but, for the purpose of determining why the two models differ, a simple explanation will suffice. EPA will not provide input during this meeting; it will be held for informational purposes only.
- Over the next two to three months, regularly schedule each of the remaining five meetings proposed by the CPG, as part of the 17-mile RI/FS Model collaboration process. The proposed meetings provide a good framework for moving this process forward and staying on schedule to have the RI/FS complete by 2015. We imagine that additional, or at least follow-up, meetings will be needed once these are underway, but they will provide a good starting point.

Please let me know if you have any questions or concerns.

Sincerely yours,



Stephanie Vaughn, Project Manager
LPRSA 17-Mile RI/FS

cc: R. Basso
E. Naranjo
A. Yeh